

Atomic Symbol Practice Pre-AP

1. The 3 particles of the atom are:

- a. _____
- b. _____
- c. _____

2. Their respective charges are:

- a. _____
- b. _____
- c. _____

3. The number of protons in one atom of an element determines the atom's _____, and the number of electrons determines _____ of an element.

4. The atomic number tells you the number of _____ in one atom of an element. It also tells you the number of _____ in a neutral atom of that element. The atomic number gives the “identity” of an element as well as its location on the Periodic Table. No two different elements will have the _____ atomic number.

5. The _____ of an element is the average mass of an element's naturally occurring atom, or isotopes, taking into account the _____ of each isotope.

6. The _____ of an element is the total number of protons and neutrons in the _____ of the atom.

7. The mass number is used to calculate the number of _____ in one atom of an element. In order to calculate the number of neutrons you must subtract the _____ from the _____.

8. Give the symbol and number of protons in one atom of:

Lithium _____	Bromine _____
Iron _____	Copper _____
Oxygen _____	Mercury _____
Krypton _____	Helium _____

9. Give the symbol and number of electrons in a neutral atom of:

Uranium _____	Chlorine _____
Boron _____	Iodine _____
Antimony _____	Xenon _____

10. Give the symbol and number of neutrons in one atom of:

(To get “mass number”, you must round the “atomic mass” to the nearest whole number) Show your calculations.

Barium _____	Bismuth _____
Carbon _____	Hydrogen _____
Fluorine _____	Magnesium _____
Europium _____	Mercury _____

11. Name the element which has the following numbers of particles:

- a. 26 electrons, 29 neutrons, 26 protons _____
b. 53 protons, 74 neutrons _____
c. 2 electrons (neutral atoms) _____
d. 20 protons _____
e. 86 electrons, 125 neutrons, 82 protons (charged atom) _____
f. 0 neutrons _____

12. If you know only the following information can you always determine what the element is? (Yes/No).

- a. number of protons _____
b. number of neutrons _____
c. number of electrons in a neutral atom _____
d. number of electrons _____

Fill in the table below, use your notes and a periodic table to help you.

Name	Symbol	Z	A	#p ⁺	#e ⁻	#n ⁰	Isotope symbol
	Na						
		17					
Potassium							
		36					
Iron							
	P						
			53				
	W						
			6				